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Remarks

In the Final Office Action mailed on November 9, 2004, claims 1-3, 5-10 and 12-26 are pending, of which claims 1-3, 5-10 and 12-26 stand rejected. By this response all claims continue unamended and arguments address the Examiner's rejections are provided. In view of the following discussion, the Applicants submit that none of the claims now pending in the application are obvious under the provision of 35 U.S.C. §103. Thus, the Applicants believe that all of these claims are now in allowable form.

It is to be understood that the Applicants do not acquiesce to the Examiner's characterizations of the art of record or to Applicants' subject matter recited in the pending claims. Further, Applicants are not acquiescing to the Examiner's statements as to the applicability of the art of record to the pending claims by filing this submission.

Rejections

35 U.S.C. 103

The Examiner has rejected claims 1-3, 5-10 and 12-26 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,246,701 issued June 12, 2001 ("Slattery") in view of U.S. Patent No. 6,327,275 issued December 4, 2001 ("Gardner"). Specifically, the nature of the Examiner's rejection has not changed from that of the previous Office Action. As such, the details will not be repeated herein and can be seen in Applicants' prior Response. Applicants continue to respectfully traverse the rejection. It is submitted that the disclosures of Slattery and Gardner are insufficient to adequately teach or suggest the claimed elements as identified by the Examiner either alone or in combination. Case law previously cited by the Applicants in the April 5, 2004 Preliminary Response and the August 14, 2004 Response under 37 CFR 1.111 is still noted and may be reviewed at the Examiner's discretion. Succinctly, it is the Examiner's burden to prove the *prima facie* case of obviousness. As the cited references are not sufficient to make the appropriate substitution, combination or other modification, Applicants contend that the claims cannot be considered obvious in view of the combination of cited references.

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Specifically, the main issue with regards to the cited art is whether it sufficiently discloses that a modified packet that is part of a transmitted output transport stream uses a matching time stamp of the received transport stream. Applicants have previously offered evidence that all previous Examiner-cited portions of Gardner and Slattery have been insufficient to support the Examiner's position regarding the teaching or suggestion of a matching time stamp as claimed in the subject invention. This includes, but is not limited to, Applicants' August 4, 2004 Response at about Page 4, Lines 19-25 with regards to Gardner and Page 4, Line 26 – Page 5, Line 20 with respect to Slattery.

In the Examiner's Final Office Action, the Examiner offers additional portions of the references in order to support his position. However, it is still respectfully submitted that these new offerings are insufficient to provide adequate teaching or suggestion or otherwise make a substitution or modification of same to result in the subject invention. Particularly, and in addressing the Examiner's comments at Page 5 (Response to Arguments at Section 3) of the Final Office Action, the Examiner first offers that Applicants' previous arguments are not persuasive because Slattery allegedly teaches a modified packet using a matching time stamp at Column 3, Lines 22-42 (the time stamps of the system clock, called program clock reference or PCRs are inserted into the pay loads of selected transport packets). In response, Applicants accept that this language exists in Slattery, but the framework that such language is used is within the reference frame of building a transport stream by encoding a number of elementary streams (ES) and assembling them into packetized elementary streams (PES) which are then inserted into transport packets. Said time stamps or PCRs are then inserted into said transport packets so a decoder can recover the system time clock in the encoded ESs. Additionally, and at Column 3, Lines 44-52, the reference clearly states that such a transport stream must carry separate sets of PCRs in order to recover different system time clocks for each program contained within a transport stream. Therefore, it is respectfully submitted that this passage of Slattery is not discussing modification of a transport stream, but the initial creation and encoding of same. Therefore, it is respectfully submitted that there is no "modification" of the time stamp in

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the manner that is claimed in that there is nothing to be modified at this point in the teachings of Slattery because the transport stream is only first being created.

The Examiner makes reference to a common time base in Column 2, Lines 9-11. However, such passage is specifically and directly related to the MPEG-1 and/or MPEG-2 compression techniques required to create the elementary streams. That is, this portion of Slattery has absolutely nothing to do with transport streams in that it is at least two levels of encoding above or outside of the transport stream processing of which the subject invention is concerned with. In other words, digital audio/video information must first be compressed (via the MPEG-1 or MPEG-2 standard, a first level processing) to create the elementary streams, and then such elementary streams are encoded and combined into either a program stream or transport stream (a second level of processing). Therefore, the common time base that the Examiner refers to in this specific section of Slattery is nothing more than the compliance with the MPEG-1 or MPEG-2 standards in order to create the elementary streams, but have nothing whatsoever to do with time stamps in a transport stream.

The Examiner then makes reference to Column 5, Lines 48-49 where Slattery teaches insertion of a null packet into the transport packet time slot to maintain the bit rate. While this offering is presented in Slattery, the reference presents absolutely no discussion as to whether a time stamp is assigned to said null packet; accordingly, it is respectfully submitted that there is no "modification" of a packet using a matching time stamp" at this location of the reference either. It is respectfully submitted that this particular section of Slattery (starting with Line 29 where the paragraph included the cited Lines 48-49 begins) presents the creation of a single program bearing transport stream and nothing more. Additionally, the paragraph prior thereto at Column 5, Lines 14-24 discusses remultiplexing of MPEG-2 transport streams. It indicates that such remultiplexer is a sophisticated, complicated architecture that controls via a single clock, a variety of remultiplexing functions including modification. However, this portion of the reference does not specifically and sufficiently teach time stamp usage in general and definitely not time stamp usage as claimed. That is, there is no modification of a packet that will use a time stamp that is the same as the received stream.

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The Examiner then offers Column 40, Lines 31-33 where Slattery teaches replacing null packets with other to-be-remultiplexed transport packet data. In response, this particular section does not aid the Examiner because further in the very same paragraph at lines 50-58, there is a more detailed discussion of how such remultiplexing is accomplished. As discussed at Column 40, Line 57 – Column 41, Line 5, when null packets are detected, they are subsequently discarded and then information of interest (from an incoming transport packet that is to be outputted in the transport stream) is assigned an "estimated departure time as a function of the receipt time of the transport package ... and an internal buffering delay within the remultiplexer node." The reference then clearly shows at Column 41, Lines 5-8, "In each respective connection queue containing to-be-scheduled transport packets, the assigned departure times might not be successive transport packet transmission times (corresponding to adjacent time slots) of the outputted TS." Therefore, the reference clearly teaches away from using the same time stamp information or ordering of stream information that was originally received. Accordingly, this portion of Slattery can not be considered for the purposes of providing a possible teaching substitution or modification that can be used with another reference and subsequently be combined to arrive at a conclusion of obviousness with respect to the overall invention.

The Examiner then offers Column 1, Lines 49-57 of Gardner as disclosing a time stamp (PCR); however, Applicants offer that this is nothing more than basic knowledge known to those skilled in the art. Further, the Examiner offers Column 4, Lines 30-48 to show the relative position of packets such as packet "B" being replaced by a null packet. While Applicants accept the existence of such language in the reference, Applicants offer that Gardner is more concerned with rate control of the transport stream than the actual timing of programs contained there within. Specifically, at the Examiner cited section and particularly at lines 49-52, it is indicated that a controller 160 ensures that decoder buffer and timing requirements for processors 110, 120, 130 (which are creating data stream 1 through the various received data streams 1, 2 ...) are met. However, it does not specifically say that these timing requirements are met by using the same time stamp (or all matching time stamps) as claimed in the subject

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invention. More particularly, the invention of Gardner is concerned and directed to the rate at which the received data stream 1 is transmitted. Such transmission control is made possible by the remultiplexing processor shown in Figure 2 of Gardner which includes methods and apparatus for controlling the delay, selecting packets to be discarded if necessary (through discard functions) and various rate estimators. Additionally, the Background of the Invention section of Gardner, at Column 2, Line 39 indicates that, "it would be desirable to provide a system for efficiently remultiplexing variable rate packets in a digital bitstream. The system should allow packets that are provided at a variable rate in a bitstream to be extracted from a received multiplex and combined with other bitstreams in such a way that timing and buffer fullness constraints on the bitstream are obeyed." Accordingly, it is respectfully submitted that Gardner is not overly concerned or specifically addressing the problem of time stamp usage. Therefore, one of ordinary skill in the art would not look to Gardner in an attempt to solve a problem related to output transport stream modification and the specific timing problems associated therewith.

As such, the combination of Slattery with Gardner does not result in the subject invention. There is no specific teaching or disclosure of time stamps as claimed in the subject invention in either of the references. Moreover, the combination of the references and the resulting invention would schedule packets in a transport stream based on an estimated departure time and then further subjected to rate estimation before transmission. This is plainly not what the subject invention claims. Accordingly, it is respectfully submitted that the combined references fail to teach or suggest the Applicants' invention as a whole.

As such, the Applicants submit that independent claims 1, 7, 12 and 13 are not obvious and fully satisfy the requirements under 35 U.S.C. §103 and are patentable thereunder. Furthermore, claims 2, 3, 5, 6, 8-10, 11, and 14-26 respectively depend from independent claims 1, 7 and 13 and recite additional features thereof. As such, and for the same reasons as discussed above, the Applicants submit that these dependent claims also are not obvious and fully satisfy the requirements under 35

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U.S.C. §103 and are patentable thereunder. Therefore, the Applicants respectively request that the rejections be withdrawn.

Additionally, the Examiner made a minor comment at the end of his Response to Arguments indicating that the subject application does not use the term "matching" time stamp. The only "time stamp" found in the application is at Page 6, Line 28. In response, it is respectfully submitted that the Examiner has too narrowly interpreted or read Applicants use of the claim language and, specifically, with regards to the word "matching." Examiner is directed to Page 6, Lines 19-21 where it is specifically indicated that "the relative position of each packet associated with a particular program remains the same with respect to the other packets within the program." It is respectfully submitted that the phrase, "remains the same" and Applicants' use of the word "matching" in the claims constitute enough similarity that the word and the phrase may be used interchangeably without any potential problem of lack of clarity or support in the application for use of such word. The Examiner is also directed to Page 10, Lines 17-24. At this particular passage, it is specifically indicated that, "packets are inserted into the output transport stream T_{OUT} without modifying the previously established timing and distance relationships of the existing packets" Once again, Applicants use of such language (that there is no modification of established timing relationships) is sufficient support for use of the word matching (to correspond exactly or be of equal qualities) without creating a condition of confusion or otherwise unsupported language in the application. Therefore, Applicants respectfully submit that use of the word "matching" to describe the time stamp in subject invention is sufficiently supported and otherwise distinct from anything else found in the prior art.

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CONCLUSION

Thus, the Applicants submit that none of the claims presently in the application are obvious under the provision of 35 U.S.C. §103. Consequently, the Applicants believe that all these claims are presently in condition for allowance. Accordingly, reconsideration of this application and its swift passage to issue are earnestly solicited.

If, however, the Examiner believes that there are any unresolved issues requiring adverse final action in any of the claims now pending in the application, it is requested that the Examiner telephone Eamon J. Wall, Esq. at (732) 530-9404 so appropriate arrangements can be made for resolving such issues as expeditiously as possible.

Respectfully submitted,

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